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(54) Title: COMPOSITIONS COMPRISING SILICONE-IN-WATER EMULSIONS AND FRAGRANCES AND HAIR CARE PREPARATIONS COMPRISING SUCH COMPOSITIONS

(57) Abstract: The present invention relates to compositions comprising i) a fragrance composition; and ii) a silicone-in-water emulsion comprising at least one surfactant, wherein the dispersed silicone has a viscosity of 100 million mm<sup>2</sup>s<sup>-1</sup> or more and a particle size of 2 µm or less. It also relates to hair care preparations comprising such compositions, which provide improved release of fragrance when applied to the hair and improved deposition of the fragrance on the hair. The invention is further related to methods of cleansing hair, which comprises applying a hair care preparation to the hair.



WO 2004/024114 A3

## AMENDED CLAIMS

[received by the International Bureau on 18 June 2004 (18.06.04);  
original claims 1-26 replaced by amended claims 1-11]

## 1. A composition comprising:

## i) a fragrance composition comprising

a) at least 10.0% by weight of a fragrance composition of one or  
more perfume ingredients having a boiling point of 250°C or  
less and ClogP of less than 3.0;

b) at least 15% by weight of a fragrance composition of one or  
more perfume ingredients having a boiling point of 250°C or  
less and ClogP of 3.0 or more; and

c) at least 20% by weight of a fragrance composition of one or  
more perfume ingredients have a boiling point of greater  
than 250°C; and

ii) a silicone-in-water emulsion comprising at least one surfactant, wherein  
the dispersed silicone has a viscosity of 100 million  $\text{mm}^2\text{s}^{-1}$  or more and a particle size of 2  
 $\mu\text{m}$  or less.

2. The composition of claim 1, wherein the silicone-in-water emulsion is non-  
ionic and the silicone is a linear polysiloxane polysilalkylene copolymer, wherein the  
monovalent silicone substituents are substantially all  $\text{C}_{1-6}$  hydrocarbon groups and the  
copolymer has a viscosity of 150 million  $\text{mm}^2\text{s}^{-1}$  or more and a particle size of 1  $\mu\text{m}$  or  
less.

3. The composition of claim 2, wherein the silicone-in-water emulsion is a non-  
ionic emulsion comprising about 60 % by weight of a linear silicone copolymer formed by  
the hydrosilylation of a Si-H end-blocked polydimethyl siloxane and a vinyl-end-blocked  
polydimethyl siloxane, wherein the copolymer has a viscosity of about 170  $\text{mm}^2\text{s}^{-1}$  and a  
particle size of about 0.5  $\mu\text{m}$ , and about 5 % by weight of non-ionic surfactants.

4. The composition of any one of claims 1-3, wherein said fragrance composition  
comprises:

a) at least 10.0% by weight of a fragrance composition of one or more  
perfume ingredients having a boiling point of 250 °C or less and ClogP of less than 3.0,

b) at least 20% by weight of a fragrance composition of one or more  
perfume ingredients having a boiling point of 250 °C or less and ClogP of 3.0 or more, and

AMENDED SHEET (ARTICLE 19)

c) at least 30% by weight of a fragrance composition of one or more perfume ingredients have a boiling point of greater than 250 °C; and

5. The composition of any one of claims 1-3, wherein said fragrance composition comprises:

- 5 a) at least 20.0% by weight of the fragrance composition of one or more perfume ingredients having a boiling point of 250 °C or less and ClogP of less than 3.0;
- b) at least 15% by weight of the fragrance composition of one or more perfume ingredients having a boiling point of 250 °C or less and ClogP of 3.0 or more; and
- 10 c) at least 30% by weight of the fragrance composition of one or more perfume ingredients have a boiling point of greater than 250 °C.

6. The composition of any one of claims 1-3, wherein said fragrance composition comprises:

- a) 30.0 to 40.0 % by weight of the fragrance composition of one or more perfume ingredients having a boiling point of 250 °C or less and ClogP of less than 3.0;
- 15 b) 20.0 to 25.0 % by weight of the fragrance composition of a one or more perfume ingredients having a boiling point of 250 °C or less and ClogP of 3.0 or more; and
- c) 40.0 to 45.0 % by weight of the fragrance composition of one or more perfume ingredients have a boiling point of greater than 250 °C.

7. The composition of any one of claims 1-6, wherein the silicone:fragrance  
20 composition weight ratio is from 1:1 to 10:1.

8. A hair care preparation comprising a composition according to any one of claims 1-8.

9. The hair care preparation of claim 8, wherein the hair care preparation is a shampoo, a conditioner, or a conditioning shampoo.

25 10. A method of cleansing hair, which comprises applying to the hair a hair care preparation according to claim 8 or 9.

11. A method of improving fragrance deposition on hair, which comprises applying to the hair a hair care preparation according to claim 8 or 9.